Transaction Cost Analysis of Structural Changes in the Distribution System: Reflections on Institutional Developments in the Federal Republic of Germany

by

CHRISTIAN KIRCHNER and ARNOLD PICOT

1. Introduction

The distribution system in the Federal Republic of Germany has undergone considerable structural changes during the last fourty years. Therefore trade issues such as drawing the "right" boderline between wholesaling and retailing, opening hours in retailing, the location of cash & carry markets, and the survival of small retail businesses have called forth much debate and litigation. However, in most cases such discussions lack an adequate theoretical framework that could separate out efficiency effects from other criteria.

The design of the channels of trade can be interpreted as a problem of economic organization. From an economic perspective, such problems must be analyzed in efficiency terms. The application of transaction cost analysis may be of assistance in analyzing the causes of the structural changes and in understanding the economic consequences involved. Trade may then be explained as an endeavor which seeks to minimize transaction costs. And structural change in the distribution system should then be regarded as response to changes in transaction costs.

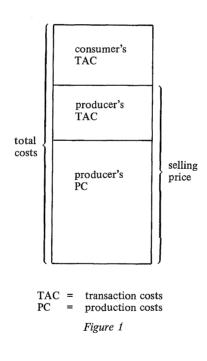
It is the purpose of this paper to develop a framework for such an analysis and to illustrate its fruitfulness by the example of some particular provisions of the German Unfair Competition Law that attempt to regulate certain trade activities.

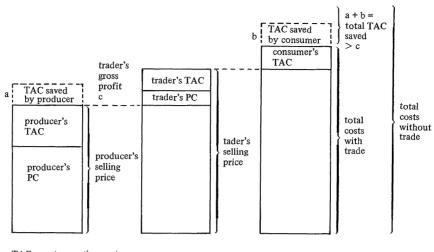
First, the application of the transaction cost analysis to distribution and trade will be introduced. Then, factors influencing the level of transaction costs in distribution systems are identified. Changes in these factors can be seen as relevant causes of structural change in distribution. Furthermore, factors which restrict an efficiency-oriented adaptation to change must be considered; many of these restrictions can be traced back to transaction costs created by the legal system. The overall transaction cost analysis would, therefore, be incomplete without reviewing the impact of the legal system on the emergence of certain types of transaction costs which tend to preserve existing structures within the distribution system. For West Germany, one major source of such transaction costs is the Law on Unfair Competition. The further analysis will focus on this set of legal rules and will concentrate mainly on two new articles (6a and 6b) introduced into the law in 1969. The amendment aimed at improving consumer protection, but in fact created barriers for wholesalers who wished to enter into retail activities and even imposed restrictions upon certain types of wholesaling. Besides these restrictions there are some further legal impediments in German law which heighten transaction costs for any unconventional new type of trade that may economize on transaction costs but does not fit into the traditional regulated pattern.

2. Trade as an Activity which Minimizes Transaction Costs

The following short outline of a transaction cost approach to distribution is based mainly on general transaction cost theory (COASE [1937], WILLIAMSON [1975], [1979], [1985], BÖSSMANN [1982], PICOT [1982], MICHAELIS [1985]), but also takes into account applications of that theory to marketing and distribution (CARMAN [1980], WILLIAMSON [1979a], GOLDBERG [1983], GÜMBEL [1985], PICOT [1986], and ANDERSON and WEITZ [1976]).

The total costs of any economic activity can be divided into two interacting subclasses: production costs and transaction costs. Transaction costs imply all the resources that have to be sacrificed in order to arrive at a mutually accept-





TAC = transaction costs PC = production costs

Figure 2

able agreement for the exchange of goods or services between two or more parties. They comprise, e.g., four different types of costs: (1) contact costs (search of information), (2) contracting costs (negotiation, formulation of contract), (3) monitoring costs (checking of quality, quantity, prices, deadlines, secrecy), (4) adaptation costs (changes during the validity of agreement). Of course, given their character as opportunity costs, the level of some of them may vary depending upon the economic actors involved.

In the case of direct distribution from producer to consumer, the following cost structure emerges (Figure 1). It is assumed that unit costs can be adequately calculated, that profit can be neglected and that no relevant production costs arise on the consumer's side. Thus, total costs impinging on a consumer consist of production costs, producer's transaction costs and consumer's transaction costs.

It seems obvious that the level of transaction costs offers an incentive to creative entrepreneurial activity, especially if that level becomes prohibitive. In addition to other measures (e.g. information and advertising, internal sales organization, consumer associations) trade is one possible and frequently observed way to reduce transaction costs in distribution.

In an efficient trade channel, the total of transaction costs of producers, traders, and consumers and of production costs of traders does not exceed the total of transaction costs of producers and consumers without trade (Figure 2). Thus, traders may be defined as specialized agents selling services which reduce the transaction costs of producers and/or consumers. They substitute for activities which previously had to be carried out by producers or consumers. Both

producers and consumers are willing to engage in trade if the opportunity costs of their own activities are greater than the price of the traders' services. Of course, transaction costs can only be identified for particular types of mutual agreements (e.g. depending on the products involved). According to the special characteristics of a transaction type, different forms of distribution and trade will emerge.

3. Determinants of Transaction Costs in the Distribution System

Factors influencing transaction costs will change traders' opportunity sets and will also lead to structural changes in the distribution system. These factors alter the efficient form of division of labor between producers, traders, and consumers, but also within the trade industry itself (e.g. relation between retailing and wholesaling). The knowledge of these factors and of their actual development helps to explicate changes in distribution and trade, and it is necessary to maintain the system's efficiency.

The following five factors

- specificity of demand,
- number of producers and consumers,
- coordination between production and demand,
- communication between producer and consumer,
- joint demand for goods

are discussed in a "ceteris paribus"-fashion. Actual trends shaping the significance of each factor are briefly mentioned. In order to assess distributional trends for one kind of good the influences exerted by all the determinants have to be summarized.

3.1 Specificity of Demand

The more consumer-specific a producer's output, the less opportunity for trade exists. The specific relation between producer and consumer calls for direct contact in order to define, evaluate and monitor the exchange in question. Transaction costs are high, but because of the specificity of the exchange they can hardly be reduced by an independent trader as a third party; his investment in very specific economic relations could not be recovered elsewhere.

Specific, non-standardized goods represent a remarkable proportion of activity in the distribution of economic performance (craft activities, construction, building, special mashinery, services of medical doctors, lawyers, consulting firms). Independent trade has no role to play in this area, and it is generally recognized that this situation tends more towards integration than towards disintegration (e.g. KLEIN, CRAWFORD and ALCHIAN [1978], WILLIAMSON [1979], ALCHIAN [1984]). Under these circumstances, general consulting and

5 JITE 143/1

However, the reverse is important: the more standardized and non-specific an economic good, the more room there is for trade as a form of distribution which reduces transaction costs. A trader's investment in the transaction process of standardized products can be applied on various occasions. Thus, trade always presupposes a certain degree of non-specificity and standardization, for otherwise it cannot function as a superior economic institution.

The production of standardized goods can be observed to increase as technical development advances (e.g. consumer electronics, software, household appliances, house construction). As a result, changes in the distribution of the output of these sectors (more involvement of general trade) must be taken into account, whereas new technical developments are elaborated in specific applications and economic relations without trade (e.g. in biotechnology).

3.2 Number of Producers and Consumers

In small numbers situations (WILLIAMSON [1975]) there is no room for free trade. The bargaining in a bilateral monopoly can perhaps be moderated and accelerated by a third party, but it cannot be economized by an independent trader who buys and sells the merchandise. The problem of profit distribution would even become more difficult, and costs would rise.

If there is a larger number of producers and consumers for a particular type of good, trade comes into play. Contacting costs can now be reduced by the intervention of traders (BALIGH and RICHARTZ [1964, 1967], GÜMBEL [1985]). If *m* producers and *n* consumers desire to make contact with each other without trade, $m \cdot n$ contacts are necessary. If one trader is involved, the number of necessary contacts is reduced to m + n, which points to relevant economies in transaction costs for consumers and producers. The larger the number of producers and consumers, the more important becomes the role of trade (number of traders, wholesaling, retailing).

In some industries (e.g. consumer electronics, automobile, oil) the number of producers is decreasing, so the number and relevance of independent trade institutions also is diminishing. From a transaction cost economics view, there is no need for wholesaling if few producers are able to communicate directly with some retail organizations or even directly with consumers.

Furthermore, efficient and inexpensive transportation facilities tend to reduce contact costs of consumers and to favor the emergence of a small number of centralized trade locations with high economic peformance compared to a large number of decentralized, scattered retail outlets in a situation with expensive transport.

3.3 Coordination Between Production and Demand

The more closely schedules of production and consumption can be coordinated, i.e. with low transaction costs, the less opportunity there is for trade (e.g. in case of flexible order production). Due to technological or economic reasons, production is very often unable to adapt to spontaneous demand. Transaction costs of marketing rise. Trade can economize on this potential cost by specializing in collecting and stocking goods from various producers and holding them available to meet a varying demand.

However, as new production technology tends to make industrial production more flexible than before ("lot quantity = 1"), the opportunity for trade will be reduced.

3.4 Communication Between Producer and Consumer

The higher the communciation barriers between producer and consumer are the more important is the role of trade as a communicator which reduces transaction costs. Communication problems in distribution can emerge because of long distances, incompatible codes and languages, lack of trust, lack of expertise, or high opportunity cost of communicating with producer/consumer. Thus, transaction costs of arriving at an agreement may be high, sometimes even prohibitive. Trade can function as a communication specialist in distribution (translator, messenger, independent third party, economies of scale for investments into language and know-how problems), thereby reducing transaction costs. This economic function of trade is very old and can best be illustrated by international distribution.

However, there are some important forces that tend to decrease the communication function of trade. Facilities for the supply and exchange of information have improved tremendously during the last decades. In many cases, information "built into" the products (brand, advertising) can reach the customer without mediation by trade. Public information and education of the consumer facilitates resolution of problems with information, evaluation and comparison (e.g. support by TV, magazines, school, consumer consulting, new data bases and technical information services). The continuously improving worldwide infrastructure of telecommunications allows for the ever more rapid and direct exchange of information between producers and selected traders or even with the consumer. Bypassing of traditional trade institutions can be seen to occur because their information and communication function, especially in connection with standardized goods, is less and less needed. New media and services tend to replace these functions, thereby economizing consumers' transaction costs. On basis of public information then, consumers choose those outlets that guarantee the cheapest supply of the goods. Of course, these outlets are in many cases not the traditional small trade businesses, but efficiently organized, large-scale traders at central locations.

3.5 Joint Demand for Goods

In order to resolve their problems, many consumers demand a set of heterogeneous goods at one time (e.g. various groceries and household goods). Normally, producers are unable or unwilling to supply a major subset of that bundle (lack of know-how and of economies of scope). If trade specialized in a very narrow range of products, transaction costs for those consumers with joint demand would exhibit a striking increase (multiple transactions for one act of problem-solving). Stocking a well assorted wide range of goods may therefore be a trading strategy that minimizes costs (shopping centers, cash and carry markets, department stores, supermarkets) that can be handled only by large trade-businesses (economies of scale).

As transportation costs tend to be low, such large-scale trade outlets will typically be found at the outskirts of cities, where land is not so expensive and traffic can flow. When combined with improved information facilities, this factor leads to concentration in trade.

4. Consequences: Changing Structure of Trade and Distribution

The above picture of developments in trade is somewhat onesided. In addition to the forces that lead to a declining role for decentralized, scattered trade outlets and to increased concentration, there are also some developments that work in the other direction. In particular, new complex products, products with regional or local attraction, products with less standardized characteristics and high demand in personal consulting, and products with rapidly changing features or with high prestige value are distributed by specialized and often small trade outlets (e.g. new goods for sports and leisure, fashion, goods for new minorities such as ecological products, jewelry).

However, one major characteristic of the development is that contact between producers and consumers is possible to a higher degree today than it was in the past. Physical distribution and product information, therefore, may be separated. Physical distribution has to serve two functions for the consumer: to minimize costs of contacting and contracting, and to assemble without friction that choice of goods which fits into the preference pattern of a given class of consumers.

The determinants discussed in the preceding section have affected the traditional pattern of branches in trade: wholesaling as the intermediary between producers and retailers has declined; retailing and resale trade have been subject to a remarkable concentration process, especially in grocery and the supply of goods for household demand. Thus, many small retailers and wholesalers have not been able to adapt to the changes in these determinants by transforming their businesses into highly specialized or large-scale trade organizations. Traditional barriers between wholesale and retail have become obsolete, because transaction costs may be saved if a trader serves a specific class of customers which has similar demand patterns (e.g. the demand group of large families, small restaurants, small service businesses). It is not sensible to distinguish within such a class of customers as to the criterion for what purpose (private or business) the products are purchased.

5. Strategic Options and Institutional Restrictions

Thus, the change of transactional determinants calls for a strategic reorientation of the trade firms involved. It is mainly traditional wholesalers and traditional small retailers and resalers that are affected. To the extent that, in the long run, the structural change ensures the existence of one trade step in the distribution channel (which is often but not always the case, see e.g. the trend to direct marketing in some industries due to the above determinants) the following strategic requirements emerge:

- for retailers, direct access to producers based on their good contacts to consumers as their special strength;
- for wholesalers, direct access to all kinds of consumers based on their good contacts to producers as their special strength.

Only if there is equal opportunity of strategic development in both directions can an unbiased competition between all groups involved take place. This, however, is not the case in West Germany.

It is worth while for many of the actors affected, especially for the large number of retailers, to invest in defending their old position so as to eliminate the potential competition from wholesalers. They may attempt to do so by adding transaction costs to the activities of their actual and potential competitors with superior cost structures. To achieve that goal, they may invest in lobbying and thus create new legal or administrative restrictions upon their competitors. Or they may seek to have existing statutes interpreted in such a way by the courts that they function as sources of transaction cost for their competitors. Typical devices in this context involve the seeking of injunctions against the activities of their competitors.

In the Federal Republic of Germany, legal devices have played an important role as means of imposing restrictions on new forms of competition and new types of activities in the distribution system. Unfair competition law, the regulation of opening hours in retailing, legal restrictions on the location of cash & carry markets, according to their wholesale or resale function, are examples of such devices.

Institutional restrictions of this type may prevent or slow down the process of structural change in the distribution system. On the other hand, there are strategic options open to those actors who are interested in new forms of competition and new types of trade activities. Because restrictions are imposed by the legal system, these options are either directed at changing those restrictions by means of legislation or interpretation of existing statutes or at adjusting to those restrictions without major changes in the cost situtation. The latter option for adjustment depends on the importance of barriers to exit created by legal restrictions such as zoning laws. Whether such strategies are successful or not depends on other characteristics of the legal system as well. Therefore, it is necessary to analyze the economic impact of the relevant statutes and their interpretation by courts. The example of unfair competition law will help to illustrate the interdependence between the legal system and the strategic options open to various actors.

6. Unfair Competition Law and Transaction Costs

6.1 Economic Functioning of Unfair Competition Law

Unfair competition law refers to certain trade practices which are viewed either as unfair or as deceptive; competitors, trade associations, and consumer protection associations are granted injunctive relief against such activities under certain conditions. Those activities therefore become less attractive as parameters applied in the process of competition. Outlawing them may lead to saving in transaction costs, because the costs of finding out optimal trade opportunities may be reduced. On the other hand, unfair competition law may even prohibit useful trade practices which lead to intensified competition if competitors are free to use unfair competition law as a tool to defend themselves against efficient newcomers. In such a case, the potential for reduced transaction costs introduced by efficient newcomers cannot be realized. This ambivalent nature of unfair competition law makes it impossible to assess its economic impact in general, rather, the impact of different unfair competition law clauses in saving or increasing transaction cost must be individually analyzed. And even in a case in which transaction cost savings are to be expected, the fact that the operation of the legal system itself is not free of cost must be taken into account. The creation and the application of unfair competition law may be regarded as constituting transaction costs for the distribution system.

6.2 The Economic Rationale of Prohibiting Deceptive Trade Practices

To be able to study the economic rationale of those clauses of unfair competition law which prohibit deceptive trade practices, the function, which is served by the dissemination of information in the distribution system must be considered (AKERLOF [1970], DARBY and KARNI [1973], NELSON [1970], NELSON [1976], SCHOEPPE and CZERWONKA [1980], THORELLI and ENGLEDOW [1980], and LEHMANN [1981]).

Start with a hypothetical situation in which producers convey the relevant product information to consumers directly and consumers search for the trade

outlets where they may buy products at lowest cost. Information about optimal buying opportunities may either be provided for potential customers by traders or may be generated by buyers themselves. If traders do not supply any information, buyers may – instead of searching themselves – acquire information about trade opportunities from specialized agencies or firms in the market. The emergence of such intermediaries may be explained in the same way as has been the emergence of trade as a separate activity interposed between production and consumption. Buyers will invest in generating or acquiring information about purchase opportunities up to the point at which the benefits derived from better information are equal to the costs of acquiring it.

The situation is changed if traders disseminate information to potential buyers with respect to purchasing opportunities. They may try to improve their individual position - i.e. to increase their turnover - by providing false or deceptive information to buyers. Such information is of no value to buyers and may even subject them to loss, because buyers who follow such deceptive statements will not realize the optimal purchase opportunity. Their welfare loss may be calculated as the difference between the actual purchase price they had to pay and the purchase price which they would have had to pay if purchasing at their optimal trade outlet. This is merely the simple argument that incorrect information leads to suboptimal economic decisions. But the difficulty in such calculation stems from the fact that finding out the optimal trade outlet would incur costs; it might well be questionable whether the loss suffered by choosing the suboptimal trade outlet as a consequence of erroneous information from traders would exceed the additional cost from searching for the optimal trade outlet. Therefore, the argument that deceptive information automatically leads to a welfare loss of consumers may be too simple and does not hold. Nevertheless, this argument usually serves as a premise of conventional wisdom in the theory of unfair competition law. Clauses protecting consumers against false and deceptive statements are viewed as economically useful because they safeguard consumers' interests in not making incorrect purchasing decisions. This line of argument works with the implicit assumption that, given correct information, buyers would be able to make optimal purchase decisions and that correct information is the alternative to incorrect information. But if a trader must not disseminate deceptive informations, why should he provide a potential customer with true information; why should he not just abstain from providing information at all and leaving the search activities to the buyer? To find the optimal purchase opportunity, buyers must invest in such activities. So, if the economic impact of the clauses of unfair competition law which prohibit deceptive information are to be assessed, the situation in which false statements are possible and the situation in which traders are free either to provide true information or no information at all must be compared. The easiest way to do so is to look into the transaction costs implied.

6.3 Transaction Cost Analysis of Clauses Prohibiting Deceptive Trade Practices

If traders provide information to buyers, and if they are free to use this device for profit maximizing purposes, potential buyers must take into account the possibility of opportunistic behavior. They must be careful to act according to the messages transferred to them by that information. They may either disregard it and attempt to generate the necessary information themselves, or buy relevant information from specialized agencies or firms. If they want to make use of information provided by traders, they must invest in testing such information. If such testing is more economical than the two other options, buyers will invest in undertaking it. That investment may be regarded as a new type of transaction cost because – given the uncertain status of the information provided by the traders – testing becomes a useful activity in the contacting phase.

The rationale of outlawing deceptive trade practices by unfair competition law may then be explained as follows: if such legal devices are effective, they may eliminate those transaction cost incurred by the necessity for buyers to test traders' information. Given the three options open to buyers to ascertain the optimal purchasing opportunity, eliminating testing costs means that the information given to buyers by traders becomes less expensive. There are cases in which buyers will choose this option and thus save transaction costs. If traders refrain from disseminating information to buyers, unfair competition law has no impact on consumers' welfare. If traders provide such information, and buyers need not test it they are better off. Therefore, the conclusion may be drawn that the provisions in unfair competition law clauses which prohibit deceptive information are transaction cost-saving devices.

6.4 Transaction Costs Caused by the Legal System

In order to make traders refrain from applying deceptive trade practices, it is necessary to devise legal provisions and to enforce them. The more detailed the case law applicable to all the varieties of potential misuses of dissemination of information, the better the chance that traders are cautious not to act in such a manner that a law court may grant an injunction against that activity. The development of such a refined case law is very costly, and it might therefore be questioned whether the benefits derived from that case law are worth the investment in the legal system. This argument must be taken seriously if a longer period of time is under review, and if the overall savings in transaction costs during this period are compared to costs incurred by the legal system. But suppose it is assumed that investment into the creation of applicable case law has been undertaken in the past, and that we are interested in the present situation; if it is then asked whether there are transaction cost savings caused by the existence of the particular provision of the unfair competition law, the investment into the legal system must be regarded as sunk cost which does not have to be taken into account. In a static model, therefore, the functioning of the legal system – as far as the application of unfair competition law to deceptive trade practices is concerned – may be viewed as virtually cost-free. But in a dynamic model this assumption no longer holds. That is to say, in periods of rapid structural change, in which competitors attempt to use devices drawn from unfair competition law as a weapon against efficient newcomers, and in which these newcomers may make use of new and unusual parameters in the process of competition, the cost of the legal system may be considerable. This insight into the transaction cost economics of the legal system leads to a not overly optimistic view of the economic benefits derived from unfair competition law clauses prohibiting deceptive trade practices. Clearly, these provisions may have a transaction cost-saving effect. But such advantages may well be outweighed by the transaction costs of the legal system. Even then, however, it has to be taken into account that, in the phase following upon such a period of rapid change, investment into the legal system during the preceding period may again be classified as sunk cost. The overall conclusion – which would have to be tested empirically - is that prohibiting deceptive trade practices by unfair competition law may lead to savings in transaction costs in the distribution system.

7. Sec. 6 a and 6 b Unfair Competition Act

7.1 Background

Prior to 1969, Sec. 3 of the German Unfair Competition Act (Gesetz gegen den unlauteren Wettbewerb - UWG) of June 7th 1909 which refers to false and deceptive statements, had been used by retailers as a device to attempt to confine wholesalers to what was called "truly functional wholesale trade" (funktionsechter Großhandel, see, e.g. MESTMÄCKER [1984], pp. 285-288; LEHMANN [1978]; FEZER [1976], pp. 708-710) and to prevent cash and carry wholesalers from doing business with private consumers (SCHRICKER and LEHMANN [1976], pp. 73-84). But German law courts refrained from interpreting Sec. 3 UWG, so as to prevent per se wholesalers doing business with private buyers (Decision of the Bundesgerichtshof of Dec. 9th 1964, "Wickel", NEUE JURISTISCHE WOCHENSCHRIFT [1965], pp. 748-753). The economic argument used to convert Sec. 3 UWG into a tool for protecting retailers against competition from new traders engaging in wholesale and retail trade as well, and thus conserving traditional trade structures within the German distribution system (for the historical development of this structure see GRÖNER and KÖHLER [1986], pp. 21-24), was very simple: anyone who engages in trade activities with private consumers and purports to be a wholesaler conveys a certain message to those private consumers: it is that his prices are lower than those of retailers because retailers have to purchase their merchandise from wholesalers and thus have a comparably unfavorable cost situation. This message must be deceptive - so the argument the lobbying retailers' associations

argued – because any trader who does business with private consumers has to calculate precisely as does a retailer and cannot offer goods at lower prices than his competitors in the retail trade. But even if there should be cost savings, they would not accrue to the private consumers but merely lead to higher profits (KRIEGER [1968]). To sum up this position: any statement by a wholesaler who conducts business with a private consumer that he *is* a wholesaler must be deceptive per se.

A very similar line of argument has been developed in regard to purchases by private consumers from producers or wholesalers which are carried out on the basis of so-called purchase certificates (Kaufscheine) distributed by retailers or specialists dealing in such purchase certificates (SCHRICKER and LEHMANN [1976], pp. 85–99). The argument was that such purchases could not be carried out at better conditions than purchases from retailers. The distribution and use of purchase certificates would automatically convey the message to the private consumer that he could save by not purchasing from the retailer. Hence, it was concluded, this message must be deceptive.

The difficulty of applying Sec. 3 UWG to the trade practices mentioned was that German law courts were willing to grant injunctive relief to competitors or trade associations by outlawing such activities – consumer protection associations never sued for an injunction in such cases – only when deception of consumers had been clearly proven. Theoretical arguments like those outlined above were not regarded by the courts as sufficient.

7.2 Introduction of Sec. 6a and 6b UWG

At that stage, the German legislator – spurred on by retailers' associations and a spirit of consumer protection – overcame these 'difficulties' of applying Sec. 3 UWG to the trade practices mentioned and introduced two new provisions to the Unfair Competition Act: Sec. 6a and 6b (FRERICHS [1967], KRIEGER [1968], MÜLLER and SCHOLZ [1968], PIEPENBROCK [1970]).

In Sec. 6a par. 2 UWG injunctive relief is granted to competitors, trade associations, and consumer protection associations against wholesalers who engage in business with private consumers and make statements pointing to the wholesale character of the business (BAUMBACH and HEFERMEHIL [1983], § 6a UWG, note 1). The provision does not require actual deception but prohibits this kind of activity *per se*. There are limited exceptions to that rule which do not play a role in the application of the provision, because the wholesaler engaging in trade with private consumers has to carry the burden of proof if he refers to these exceptions.

In Sec. 6b UWG the distribution and sue of purchase certificates – as described above – is prohibited. Competitors, trade associations and consumer protection associations have the right to sue for an injunction against such activities. An exception is only made in cases where the certificate is confined to one single purchase and where it may be only used once (BAUMBACH and HEFERMEHL [1983], § 6 b, note 2). In practice, this exception is not of major importance. As was the case in Sec. 6a par. 2 UWG, the provision of Sec. 6b UWG does not require actual deception of consumers to have occurred but prohibits per se the issue and use of purchase certificates.

7.3 General Impact

At the first glance, it might be thought that such very specialized provisions of the German Unfair Competition Act would have no or only a minor impact upon structural change within the distribution system. Compared to Sec. 3 UWG, both provisions appear to be very similar, and seem to be pure consumer protection devices safeguarding consumers against undue deception and consequently against suboptimal purchase decisions. Furthermore, it could be thought, the costs incurred by the operation of the legal system are probably very low because both provisions introduce *per se* rules which are easier to handle and less open to argument than Sec. 3 UWG. But on the other hand it must be realized that, as per se rule, these provisions also cover cases in which there is no deception of consumers. In addition, they outlaw trade activities which otherwise would help to break down traditional barriers between wholesale and retail trade. They therefore tend to conserve traditional trade structures, even if they should prove to be less efficient than new ones. The argument that application of these provisions is very cheap because of the per se character of the norms has meanwhile proven to be incorrect, because both provisions have become battlefields on which retailers' associations attempt to restrict still further the business practices of cash and carry wholesalers. (SCHRICKER and LEHMANN [1976], pp. 116-130, 150-154; GRÖNER and KÖHLER [1986], pp. 70-126). In light of these doubts as to the actual economic impact of Sec. 6a and 6b UWG it might be useful to apply transaction cost analysis to these provisions (KIRCHNER [1976]).

7.4 Transaction Cost Analysis of Sec. 6 a UWG

Sec. 6a par. 2 UWG grants an injunction to competitors, trade associations, and consumer protection associations if a wholesaler engages in direct business with private consumers and purports to act as a wholesaler. There could be cases in which consumers are deceived by being induced to believe that they are being offered exceptional conditions but in reality are buying at normal or even at less favorable conditions than from retailers. In such cases Sec. 6a par. UWG may lead to transaction cost savings. The line of argument would be identical to that for Sec. 3 UWG, which has been discussed above. But – as has been stated – Sec. 6a par. 2 UWG is a *per se* rule and prohibits statements pointing to the wholesale character of the business even in such cases where customers are well aware of the real price-saving opportunities. Due to the presently prevailing interpretation of Sec. 6a par. 2 UWG, any statement as to the wholesale character of the trader falls under the provision (BAUMBACH and

HEFERMEHL [1983], §6a note 7), so that in effect it covers any sale to a private consumer by a wholesaler. The threat of an injunction against such activities functions as an effective tool to eliminate such trade practices. The fact that the wholesaler has to carry the burden of proof if he desires to make use of one of the very narrowly designed exceptions in Sec. 6a UWG means in effect that these exceptions have no practical significance. They are law on the books, not law in action.

The direct effect of Sec. 6 a par. 2 UWG, therefore, is that wholesalers cannot do business with private consumers. They must confine their sales to commercial buyers. i.e. producers, retailers, and large institutional buyers such as hospitals.

If a wholesaler were free to do business with any type of customer, and if it were sensible not to distinguish between different types of buyers, the restriction inherent in Art. 6a UWG has a double effect: it prevents those wholesalers from realizing their optimal opportunities in distribution, thus maintaining transaction costs in the distributions system at a higher level than necessary. And those buyers who would save by purchasing from such wholesalers must invest additional resources into searching for what is now the second best source for their purchases. Transaction costs of the distribution system would be increased by both effects.

7.5 Transaction Cost Analysis of Sec. 6b UWG

Sec. 6b UWG prohibits the issue and the use of purchase certificates which enable private consumers to buy directly from the producer or the wholesaler. This provision has a quite similar effect to that of Sec. 6a par. 2 UWG. As far as cases of consumer deception are concerned, there might be some benefits deriving from such a provision. But as this section is a *per se* rule as well, there are cases in which the consumer is well aware of the cost saving opportunity offered to him by this system. To outlaw the possibility of purchasing goods at the cheapest available source means additional transaction costs for whole-salers and consumers.

7.6 The Economic Rationale for Strictly Separating Wholesaling from Retailing

The above-mentioned increase in transaction costs within the distribution system because of the introduction of Sec. 6a and 6b UWG would not exist if the arguments of the proponents of these provisions are valid: any wholesaler who does business with private consumers automatically loses his cost advantage as a wholesaler and has to calculate like a retailer. Even if there should be some cost advantage remaining, this would not be passed onto the customer but would raise the trader's profit.

The first part of this argument cannot be defended in the light of modern developments in the distribution system, as has been shown above. There are opportunities for cost savings in the distribution system which are due to changed conditions on the production side and on the consumption side. If the trading function is increasingly confined – at least in many business sectors – to simply offering a large choice of goods, and minimizing distribution costs by not offering extra services to the customers, it would make no sense at all to distinguish between different types of buyers and to discriminate against one class of customers. Therefore, the idea that in present-day circumstances, "superior" cost functions are the results of restricting trading to 'truly functional wholesaling' is anachronistic.

Neither is the second part of the argument of the proponents of Sec. 6a and 6b UWG valid. The idea that actual cost advantages of traders would not be passed onto customers but lead to rising profits works with the implicit assumption that those traders hold a monopoly position. If they have competitors who possess similar cost functions and the same option of doing business with all types of customers, such monopoly profits would very soon be eliminated. In the light of the fierce competitions in the cash and carry wholesale trade in Germany, the assumption of a monopoly position of wholesalers who engage in business with private consumers is totally unrealistic.

The proponents of the introduction of Sec. 6b UWG have refined the argument that wholesale and retail trade should be strictly separated for the case in which the private customer obtains access to the wholesaler by means of a purchase certificate (KRIEGER [1968], p. 517): there cannot be any cost saving, it is argued, but - on the contrary - there are additional costs, because the agent who hands out purchase certificates seeks to make a profit as well. But if we examine the transaction costs of such tripartite purchases where the private consumer gets a purchase certificate from the retailer and then buys directly from the wholesaler, the typical transaction costs of the distribution have merely been re-arranged. The wholesaler takes on certain new activities - e.g. contracting - and the customer takes on new activities, e.g. transport. The retailer gets a kind of commission fee for bringing together buyer and seller. If the private consumer has free access to the wholesaler, this commission fee represents the search costs for finding the optimal source for his purchases. But if private consumers have no free access to wholesalers and the use of purchase certificates is the only key to open this door, then the price paid for such a purchase certificate represents - at least partly - an economic rent for those traders who have the ability to bypass existing impediments. Such economic rents are not inherent in the tripartite purchase by means of purchase certificates, but they are a specific type of transaction costs of the distribution system which restricts the access of private consumers to wholesalers by legal means.

In a system in which consumers have free access to wholesalers, the argument that purchases by means of purchase certificates are automatically less favorable than purchases from retailers cannot be valid. The buyer possesses different options as to where to acquire the information about his optimal source for purchases; the purchase certificate is simply one of these options. The buyer will only make use of it if it is more favorable than the other options, e.g. information from consumer consultants, public media, or wholesalers themselves. The real issue is the reliability of the information conveyed by such purchase certificates. But that in turn presupposes a legal provision preventing deception of consumers, not a *per se* rule.

7.7 Result

The result of this analysis is that, on balance, transaction costs have been added to the distribution system by the introduction of Sec. 6a and 6b UWG. Thus in fact both provisions seek to conserve traditional trade structures and are transaction-cost-creating devices.

In consequence, it could merely be recognized that those affected by the structural change in the distribution system have managed to create certain new transaction costs and thus to slow down the pace of structural change. But as has been mentioned above, both provisions are a battlefield with retailers' associations on one side and wholesalers – especially cash and carry wholesalers – on the other side. The reason for such conflict is very simple: both provisions are interpreted at present in such a way as to force any wholesaler to confine his activities to what is called "truly functional wholesale trade"; violations of that principle are seen by some authors (BAUMBACH and HEFERMEHL [1983], §6a note 12; FEZER [1976], GERSTENBERG [1976], WEIHENMEYER [1975], WILKE [1977]) arising in cases in which cash and carry wholesalers sell goods to commercial and institutional buyers who acquire goods for their private use goods which are not specific to their business.

In these cases Sec. 6 b UWG will apply to the type of customers' identity cards issued by cash and carry wholesalers to their commercial and institutional customers to prevent private consumers from obtaining access to their markets. This interpretation has been criticized by both lawyers and economists (LEHMANN [1978], PFAFF [1977], SCHRICKER [1975, 1979], SCHRICKER and LEHMANN [1976], and GRÖNER and KÖHLER [1986]). If transaction cost analysis is applied to these extensive interpretations of Sec. 6a par. 2 and 6b UWG, one realizes that very considerable new transaction costs are created: control mechanisms installed in order to distinguish betwen different types of sales according to type of business classifications cause transaction costs as such, transaction costs for the customers (the necessity to search for the second best source for puchases) and transaction costs for the wholesale trade, because the restriction to certain type of sales means rising distribution costs due to less favorable scale economies.

This discussion of legal interpretations of Sec. 6 a par. 2 and 6 b UWG shows that the transaction-cost-creating potential of both provisions is much greater than expected. If this extensive interpretation is gradually broadened, the overall effect will be to eliminate those types of wholesalers who do business on a cash and carry basis. Structural change of the distribution system could thus not only be stopped but the wheel of structural change could even be turned backwards.

Unfair competition law in Germany has created considerable transaction costs within the distribution system and has slowed down structural change. But as statutory law it is not a fixed set of rules but rather a basis for the creation of case law evolving according to certain principles of interpretation; the real transaction-cost-creating potential of these two provisions is a matter of legal reasoning. It has been shown that false economic rationales have played a role in the development of unfair competition law and that transaction cost analysis may refine and correct this line of argument.

8. Conclusion

The application of transaction cost analysis to the phenomenon of structural change in the distribution system has helped to determine factors which are relevant for such structural change. On the other hand, it has become evident that there are decisive institutional restrictions. The detailed analysis of transaction costs due to legal provisions in the field of unfair competition law has brought to light the very considerable economic impact of unfair competition law clauses which at first seem to be irrelevant. And it has become clear that not only statutory law, but also principles which guide the legal interpretation of such norms, operate to create transaction costs. Economic reasoning has played a major role in the development of statutory law and its interpretation. Transaction cost analysis may add to the understanding of the economic functioning of law and provide a tool for criticizing the conventional wisdom which has for long held the field in this area. Thus economic analysis may itself be a factor relevant for strategic options of the actors involved. It has to be seen whether such a new approach can play a role in the ongoing struggle about issues of the interpretation of unfair competition law. In the light of the existing difficulties in law and economics understanding one another's approach one might be sceptical as to the actual results. But this should not blur the picture as to the usefulness of refining the institutional approach in economics by even applying transaction cost analysis to various interpretations of existing legal provisions.

References

- AKERLOF, G. [1970], "The Market for Lemons: Qualitative Uncertainty and Market Mechanism", Quarterly Journal of Economics, 84, 488-500.
- ALCHIAN, A. A. [1984], "Specificity, Specialization and Coalitions", Zeitschrift für die gesamte Staatswissenschaft/Journal of Institutional and Theoretical Economics, 140, 34-49.

ANDERSON, E. and WEITZ, B. E. [1986], "Make-or-Buy Decisions and Marketing Productivity", Sloan Management Review, 37, 3-10. BALIGH, H. H. and RICHARTZ, L. E. [1964], "An Analysis of Vertical Market Structures". Management Science, 10, 667-689.

[1967], Vertical Market Structures, Boston.

- BAUMBACH, A. and HEFERMEHL, W. [1983], Wettbewerbsrecht, 14th ed., München.
- BÖSSMANN, E. [1982], "Volkswirtschaftliche Probleme der Transaktionskosten", Zeitschrift für die gesamte Staatswissenschaft/Journal of Institutional and Theoretical Economics. 138, 664-679.

CARMAN, J. M. [1980], "Paradigms for Marketing Theory", pp. 1-36 in: I.N. Sheth (ed.), Research in Marketing.

COASE, R. [1937], "The Nature of the Firm", Economica, 4, 386-405.

DARBY, R. R. and KARNI, E. [1973], "Free Competition and the Optimal Amount of Fraud", Journal of Law and Economics, 14, 67-88.

FEZER, K.-H. [1976], "Die Grenzen des Selbstbedienungsgroßhandels im Leistungswettbewerb", Betriebs-Berater, 31, 705-718.

FRERICHS, G. [1967], Änderung des UWG?", Wettbewerb in Recht und Praxis, 13, 427-428.

GERSTENBERG, E. [1976], "Ist der C + C-Handel noch Großhandel?", Wettbewerb in Recht und Praxis, 22, 72-74.

GOLDBERG, J. D. [1983], A Transaction Costs Analysis of Franchising with Empirical Applications to the Restaurant Industry, Dissertation University of Pennsylvania.

GRÖNER, H. and KOEHLER, H. [1986], Der Selbstbedienungsgroßhandel zwischen Rechtszwang und Wettbewerb, München.

GÜMBEL, R. [1985], Handel, Markt und Ökonomik, Wiesbaden.

- KIRCHNER, C. [1986], "Fehlentwicklungen im Recht des unlauteren Wettbewerbs", Aktiengesellschaft, 31, 205-218.
- KLEIN, B., CRAWFORD, R. G. and ALCHIAN, A. A. [1978], "Vertical Integration, Appropriable Rents and the Competitive Contracting Process", Journal of Law and Economics, 21, 297–326. KRIEGER, A. [1968], "Ist das UWG reformbedürftig?", Gewerblicher Rechtsschutz und
- Urheberrecht, 511-518.
- LEHMANN, M. [1968], "Funktionsechter Selbstbedienungsgroßhandel", Wettbewerb in Recht und Praxis, 14, 345-349

[1981], Vertragsanbahnung durch Werbung, München.

MESTMAECKER, E.-J. [1984], Der verwaltete Wettbewerb, Tübingen.

MICHAELIS, E. [1985], Organisation unternehmerischer Entscheidungen - Transaktionskosten als Beurteilungskriterium, Frankfurt/M., Bern, New York.

- NELSON, PH. [1970], "Information and Consumer Behavior", Journal of Political Economy, 78, 311-329.
- NELSON, R. H. [1976], "The Economics of Honest Trade Practices", Journal of Industrial Relations, 24, 281-293.

NEUE JURISTISCHE WOCHENSCHRIFT [1976], 29.

PFAFF, D. [1977], "Überdehnung des Verbraucherschutzes zur Konkurrenzabwehr?" Betriebs-Berater, 32, 456-462.

- PICOT, A. [1982], "Transaktionskostenansatz in der Organisationstheorie: Stand der Diskussion und Aussagewert", Die Betriebswirtschaft, 42, 267-284.
- [1986], "Transaktionskosten im Handel Zur Notwendigkeit einer flexiblen Strukturentwicklung in der Distribution", Der Betriebs-Berater, 41, Beilage 13/86, 1-16.

PIEPENBROCK, M. [1970], "Das Änderungsgesetz zum Gesetz gegen den unlauteren Wettbewerb", Wettbewerb in Recht und Praxis, 16, 132-136.

SCHOEPPE, G. and CZERWONKA, CH. [1980], "Consumer Information and Workability of Competition: A Theoretical Framework", 1, in: Ch. Czerwonka and G. Schoeppe (eds.), Consumer Information: Improving the Interaction between Supply and Demand, Frankfurt/Main.

- SCHRICKER, G. [1975], "Grenzen des Verbraucherschutzes", Gewerblicher Rechtsschutz und Urheberrecht, 349-358.
- [1979], "Anmerkung", Gewerblicher Rechtsschutz und Urheberrecht, 413–415.
 and LEHMANN, M. [1976], Der Selbstbedienungsgroßhandel, Köln, Berlin, Bonn, München.
- THORELLI, H. B. and ENGLEDOW, K. L. [1980], "Information Seekers and Information Systems: A Policy Perspective", *Journal of Marketing*, 44, 9–27.
- WEIHENMEYER, H. [1975], "Die rechtliche und wettbewerbspolitische Einordnung des Cash and Carry-Großhandels", Wettbewerb in Recht und Praxis, 21, 484-491.
- WILLIAMSON, O. E. [1975], Markets and Hierarchies: Analysis and Anti-Trust-Implications, London.
- [1979], "Transaction Cost Economics: The Governance of Contractual Relations", Journal of Law and Economics, 22, 233-261.
- [1979a], "Assessing Vertical Market Restrictions: Anti-Trust-Ramifications of the Transaction Cost Approach", University of Pennsylvania Law Review, 127, 953-993.
- [1985], The Economic Institutions of Capitalism Firms, Markets, Relational Contracting, New York, London.
- WILKE, D [1977], ""Cash & Carry"-Betriebe zwischen Groß- und Einzelhandel", Wettbewerb in Recht und Praxis, 23, 69-79.

Professor Dr. Dr. Christian Kirchner LL, M. FB Rechtswissenschaften Universität Hannover Hanomagstraße 8 D-3000 Hannover 91 Bundesrepublik Deutschland

Professor Dr. Arnold Picot Lehrstuhl für Allgemeine und Industrielle Betriebswirtschaftslehre Technische Universität München Arcisstraße 21 D-8000 München 2 Bundesrepublik Deutschland

6 JITE 143/1

Transaction Cost Analysis of Structural Changes in the Distribution System: Reflections on Institutional Developments in the Federal Republic of Germany

Comment

by

THRÁINN EGGERTSSON

The paper by KIRCHNER and PICOT [1987] deals with the interesting question of how the evolution of organizational form is constrained by statutory law and by the courts' interpretation of existing law. I agree with the authors' conclusions that sections 6a and 6b of the West German unfair-competition legislation are likely to create inefficiencies in the country's trade sector, and that the argument which says the legislation protects the consumer in some way has no basis in economic theory. My comments deal with various aspects of the authors' application of economic analysis, particularly transaction cost economics, to the form of organization in the trade sector.

In a laissez-faire market, the organizational form which minimizes the cost of producing and distributing a commodity to the final consumer, while covering all costs, is the one that survives (ALCHIAN [1950]). Total cost to the final consumer includes production costs and transaction costs of the agents who produce and distribute the commodity and the consumer's own transaction and production costs. Transportation is an example of a consumer's production costs.

The authors concentrate their discussion on the impact of the legal system on transaction costs. I find their focus too narrow: the constraints imposed by the legal system influence the choice of organizational form and, through that choice, affect both production and transaction costs.

The concept of transaction costs is among the most valuable recent additions to economic theory. However, it is still a concept that many economists have difficulty accepting. Perhaps the dichotomy production costs and transaction costs, and the corresponding division of activities into production and transactions, is not as useful as it seems. Production costs hail from the traditional neoclassical model with its assumption of full information. Transaction costs appear when we allow for the cost of information. It is clear that transaction costs appear at every point in the production process – within the firm we sometimes refer to these costs as agency costs. Might it be more useful to follow the neoclassical tradition and state the analysis more in terms of production: the production of information, the production of contractual agreements, the production of distributional services, the production of consumer satisfaction, and so on? The discussion in the paper sometimes gave me the feeling, probably unintended by the authors, that the trade sector was not engaged in production, and production costs were associated with material production.

The organizational change which the empirical component of the paper examines is vertical integration in the West-German trade sector. It is argued that legal measures which block spontaneous vertical integration are inherently inefficient. The modern literature on vertical integration is essentially in agreement with this conclusion, provided the firms in question operate in unfettered, competitive markets (WARRREN-BOULTON [1978]). However, interference by government in competitive markets can create incentives to bypass taxes, regulations and price controls through vertical integration, and integration motivated by such factors need not be an efficient move. With growing involvement of government in markets, perverse incentives are pervasive. I presume that vertical integration in the West-German trade sector is not an unintended effect of government intervention, such as taxation.

Opportunities to monopolize trade sometimes act as incentives for vertical integration. The new industrial organization has taught us that various forms of vertical control, which until recently were seen as wasteful monopolistic practices, are efficient forms of organization which are required to protect specialized assets, and appropriable quasi-rents (KLEIN, CRAWFORD and ALCHIAN [1978], WILLIAMSON [1975]). Still, I am surprised that the opponents of vertical integration in the German trade sector have not put more emphasis on the evils of monopoly. I am unfamiliar with German law, but is the anti-trust legislation a less effective tool for special interest groups to manipulate than the unfair competition law?

NELSON [1970] introduced the distinction between search goods and experience goods. The quality of search goods can be determined by inspection prior to purchase, but the quality of experience goods can only be established in the process of consumption - one example is canned tuna fish, and durable consumer goods often have characteristics of experience goods. Nelson argued that "Limitations on consumer information about quality have profound effects upon the market structure of consumer goods." He sought to show that the market for experience goods has other structural characteristics than the market for search goods, for example with respect to location of retail outlets and the optimal composition of inventories. My impression is that the incentives for the structural changes in the German trade sector, which are being blocked by sections 6a and 6b, namely direct contacts between wholesalers or producers and consumers, is consistent with a growing role of experience goods in the market for consumer goods, which in turn may be related to an increase for consumers in the relative price of time. In general, an increase in the relative price of time is consistent with many of the reasons given by the authors for structural changes in the trade sector.

Thráinn Eggertsson

The parties who maintain that wholesalers should not be allowed to deal directly with consumers rest their case on a twofold argument: first, the total cost to consumers of a commodity, when they deal directly with a wholesaler, is equal or higher than the total cost of the same commodity when it is bought from a conventional retailer, and second, consumers prefer to deal with wholesalers only because the name wholesale signals wholesale prices which are usually lower than retail prices. This argument is not very convincing. It suggests that there are extraordinarily high costs of acquiring information about market prices, whereas it seems more likely that information about prices in cash-and-carry markets and other wholesale outlets relative to prices in conventional retail stores would spread. A somewhat more sophisticated case could be made by arguing that there were subtle differences in product quality between wholesale and retail outlets which goes unnoticed by consumers because information about prices.

My final comment relates to an interesting discussion by the authors of whether the welfare of consumers is necessarily increased if the state effectively prevents the spread by business of misleading and deceptive information.

The authors assume that the ban of false advertising can have one of two consequences: a) business supplies correct information, and the search and experience costs of consumers are reduced, or b) business reacts by supplying no information at all, and the ban on deceptive information, therefore, has no effect on consumer welfare. I am not quite sure that I agree: if alternative b) is somehow the profit-maximizing response of business to the ban, I find it hard to see how one could generally assume that the welfare of consumers is unaffected. According to the authors, outcome b) forces consumers to generate their own information, and rely on specialized information agencies. Before the law against deceptive information, the consumer acquired information, at least partly, by filtering information provided by producers and distributors. In the case of experience goods, as NELSON (1974) points out, the very fact that a producer spends large sums advertising his brand is a valuable piece of information for the buyer. If prior to the ban the consumer's optimal strategy for collecting information involved testing data from this source, the elimination of that data has increased the cost of information to the consumer and reduced his welfare, rather than left him intact.

References

ALCHIAN, A. A. [1950], "Uncertainty, Evolution, and Economic Theory", Journal of Political Economy, 50, 211-221.

KIRCHNER, C. and PICOT, A. [1987], "Transaction Cost Analysis of Structural Changes in the Distribution System: Reflections on Institutional Developments in the Federal Republic of Germany", Journal of Institutional and Theoretical Economics, 143, 62-81.

KLEIN, B., CRAWFORD, R. G., and ALCHIAN, A. A. [1978], "Vertical Integration, Appro-RELENY, D., CRAWFORD, R. G., and Alconnary, A. R. [1976], "Vertical Integration, Appropriable Rents, and the Comparative Contracting Process", *Journal of Law and Economics*, 22, 297–316.
 NELSON, P. [1970], "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", *Journal of Political Economy*, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Consumer Behavior", Journal of Political Economy, 10(1970), "Information and Political Economy,

NELSON, I. [1970], INFORMATION and Consumer Behavior, Journal of Political Economy, 78, 311–329.
-- [1974], "Advertising as Information", Journal of Political Economy, 82, 729–754.
WARREN-BOULTON, F. [1978], Vertical Control of Markets: Business and Labor Practices, Cambridge, Mass.

WILLIAMSON, O. E. [1975], Markets and Hierarchies, New York.

Professor Thráinn Eggertsson University of Iceland Faculty of Economics and Business Administration 101 Reykjavik Iceland .

Transaction Cost Analysis of Structural Changes in the Distribution System: Reflections on Institutional Developments in the Federal Republic of Germany

Comment

by

WOLFGANG BALLWIESER

It is rather needless to say that KIRCHNER and PICOT [1987] have given us a very interesting and stimulating paper. Their analysis of the transaction costminimizing function of the distribution system is intelligent and novel. With the exception of the pioneering, though somewhat different work of WILLIAMSON [1979] and Chapter Seven of GÜMBEL's new book [1985], where the discussion also has a different aim, Kirchner's and Picot's analysis is – to my knowledge – the first that has been presented. Hence it is with the best of reasons that their paper can be called novel. Perhaps it should be also noted that such a fruitful cooperation between a professor of law and a professor of business administration, as it demonstrates, cannot be observed very often, although it is very desirable.

I will not misuse my function to read a new paper nor would I find it worth while merely to sing the praises of their paper. The discussion will perhaps be given the greatest stimulus if I immediately pick out some problems which seem to me to deserve more attention than they have found in the paper. First, let me give you a summary of those problems. They relate to

- (1) the efficiency concept that underlies the paper of Picot and Kirchner,
- (2) the exact content or meaning and implication of what is called structural change,
- (3) the completeness of the transaction cost analysis when it has been used to deny any sense to Sec. 6a and b of the Unfair Competition Act, and, last but not least,
- (4) the ability to quantify those cost components which seemed to be relevant to the authors by means of *a priori* reasoning or empirical research results.

Let us start with the efficiency concept that underlies the paper. It seems merely common sense to say that efficiency is a term which must be defined in a theoretical model. But the model, especially one feature of it, has not been explicitly formulated. That relevant feature is the time horizon, which could have an important implication for an argument which has been advanced in the last part of the paper concerning the economic rationale for strictly separating wholesaling and retailing (Section 7.6).

Efficiency has been used in the sense of cost minimization, where cost has a very broad meaning. In the first part of the paper the analysis has been conducted with respect to a particular firm. But when the deletion of Sec. 6a and 6b of the Unfair Competition Act is proposed, the consequences for the productive and pricing decisions of producers and traders must also be considered, which means that the partial analysis must give way to a general analysis. The term "cost" must be related to the overall economy; in this instance, it is necessary to define the precise meaning of cost minimization. At this point, it is unnecessary to stress the fact that it may be very difficult to estimate some of the transaction costs components. Rather, it must be pointed out that cost minimization needs the explication of a time horizon. This time horizon is not clear in the paper.

To clarify this point further, assume that Sec. 6a and 6b UWG are deleted from the Unfair Competition Act without any replacement. Then, as Kirchner and Picot have shown, consumers can buy from the wholesaler or the retailer, the set of contracting partners can be widened and the information and/or contracting costs of the consumers will perhaps be reduced. Competition between wholesalers and retailers will be intensified. A large number of retailers could be driven from the market if the wholesalers are able to sell goods for a sufficiently long period at prices which are not high enough to compensate the costs of the retailers. The price reduction (on average) will of course be appreciated by the consumers - but perhaps only in the short run. If the elimination of Sec. 6a and b leads to a different concentration process compared to the case where 6a and 6b are not deleted, some assumption must be made as to the behavior of the distributing firms within that concentrated market. Cost minimization must be defined in the context of this concentration process. Is it really correct to assume that fierce competition within the trade will solve for us the long run cost minimization problem? I am unable to provide you with an answer which will still all doubt; I would feel more comfortable if there were some empirical arguments available which can show that the probability that competition can be expected to persist is high.

In addition to the problem of efficiency, I am unsure as to what precise meaning has been attached to the phrase "structural change" which is or – more carefully – may be the basis for the reorganization of the distribution system. Structural change must mean the changing of those five factors which influence transaction costs; those factors have been specified and explained by Kirchner and Picot and it is not necessary to repeat them here. But I must confess that although I have gone over the paper several times, I could not detect a unique direction of change, with one important exception. That exception can be found in Section 5, where it is said that contact between producers and consumers is more feasible today than in the past. Furthermore, it is argued that traditional

barriers between wholesale and retail have become obsolete because of the determinants discussed before. But this result has not been proven.

For example, it has been said that the production of standardized goods is increasing as technical developments take place and some branches have been named in which this is the case. But at the same time, it has been mentioned that products with less standardized characteristics and high demand in personal consulting are also enforced (Section 5). Or take another factor. New communication technologies allow better communication between producers, traders, and consumers. Some advantages may plausibly be said to accrue to large-scale traders in using these technologies. All this seems to be correct. But does that mean that personal consulting as a whole will be diminished on average, or does it merely mean that traditional small-scale traders are seeking and developing opportunities of engaging in the trade in those products where their advantage will still be preserved: the advantage that can be traced to personal consulting capacities with which no computer can compete?

Or take the last factor: joint demand for goods. The joint demand is the better the less time a consumer has, for it reduces the frequency of purchasing and the number of contacting and contracting activities. On the other hand, it must be considered that those traders who allow joint demand are very often located outside the cities, which means that purchasers have to use their own cars, must sometimes park their cars a good distance from the market, and have to wait a long time until they can pay. Taken together, all this means that the cost per contacting and contracting unit will have risen. In addition, is it really possible to say that the joint demand for goods is now more often observable? Is it not compensated for by an other-directed process which has been influenced by the argument that one should use the streetcar or the subway instead of one's own car, or by the argument that the act of purchasing can be used to make the social contacts which are facilitated by small-scale traders? It may be helpful to remind the American colleagues present that shopping is very different in the United States and in Germany with respect to the acceptance of markets located on the outskirts of the city. In addition, it may be noted that an argument based on the value of social contacts is of course excluded by an efficiency concept based on cost minimization.

To repeat the point once again: structural change has been used to show that flexibility within the distribution system is needed. But I would also like to know whether structural change can be described in such a way that it has a direct implication for the discussion of Sec. 6a and 6b of the Unfair Competition Act.

The third problem I want to stress is the question as to whether Kirchner's and Picot's discussion of transaction costs is completed. I do not have any doubt that this is the case when I look at the first part of the paper. My problem arises with respect to the second part of it, where I have gained the impression that the information and contracting costs of the consumers have dominated the discussion. I wonder whether there are significant information costs of producers which could be lower if the distribution system is indeed divided up into wholesaling and retailing traders. First of all, it should be mentioned that pursuing both activities simultaneously is not prohibited; what is prohibited is a wholesaler selling his products directly to a consumer. Besides this, there could be special advantages to a producer if the retailers are able to acquire more and/or better information about consumers' preferences than wholesalers. This could be especially the case when new products are being introduced into the market or when the standardization of a product is not possible or not desirable. But it could be even the case when a standardized product is offered, since the retailers may offer a set of competing products which differs from that offered by a wholesaler and may gain some information about the competitive advantage or disadvantage which differs from that gained by the wholesalers. It could be asked why such information relevant to the producer may be better produced by retailers than by wholesalers, since in principle the latter group could also gain the information. One simple answer could be that the retailers have more personal staff to communicate with the customers.

A consequence of this argument would be that a weighing of consumers' information costs is too narrow and that an elimination of Sec. 6a and 6b of the Unfair Competition Act could imply a rise in the information costs of producers when the distribution structure is changed in such a way that a large number of the retailers cannot survive. Of course, I am fully aware of the problem that the arguments I have advanced are speculative and *a priori*. My knowledge does not go far enough to enable me to say precisely how firms reduce in practice the gaps about consumer preferences.

This leads me to the last problem which deserves attention. I find the transaction cost analysis of institutions a challenging and very promising way of obtaining a better understanding of these institutions. But what I do miss up to now is the forging of a connection between *a priori* reasoning with empirical results, especially the attempt to quantify the components of transaction costs. I know that this problem is not unique to transaction cost analysis. Nor should my remark be misunderstood as a criticism of Christian Kirchner and Arnold Picot for not themselves having done this quantitative analysis. That would demand a totally new research project. Nevertheless I would like to know whether there are empirical results which may be taken to improve still further the – as a whole – outstanding quality of their arguments.

References

GÜMBEL, R. [1985], Handel, Markt und Ökonomik, Wiesbaden.

PICOT, A. and KIRCHNER, C. [1987], "Transaction Cost Analysis of the Structural Changes in the Distribution System: Reflections on Institutional Developments in the Federal Republic of Germany", Journal of Institutional and Theoretical Economics, 143, 62-81.

Wolfgang Ballwieser

JITE

WILLIAMSON, O. E. [1979], "Assessing Vertical Market Restrictions: Antitrust Ramifications of the Transaction Cost Approach", University of Pennsylvania Law Review, 127, 953–993.

Professor Dr. Wolfgang Ballwieser Institut für Unternehmensbesteuerung und Wirtschaftsprüfung Universität Hannover Wunstorfer Straße 14 D-3000 Hannover 91 Bundesrepublik Deutschland